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Acronis® Backup & Recovery ™ 10 Server for Windows

Command Line Reference

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1. Command-line mode and scripting in Windows

Acronis Backup & Recovery 10 supports the command-line mode and enables backup automation by executing XML scripts.

Acronis Backup & Recovery 10 uses the Acronis True Image Echo command line utility with the following additions:

1. Ability to use the before/after data capture commands.
2. Ability to use the VSS support option.
3. Ability to check for a license on the license server with the **/ls_check** command.
4. Ability to use file exclusion at disk backup.

The rest of the commands and options are exactly the same. For this reason, the command line reference uses the terminology accepted in Acronis True Image Echo.

The command line logs are saved in the old (Echo) format and cannot be converted to Acronis Backup & Recovery 10 logs.

Command line mode limitations

The command-line mode functionality is somewhat limited as compared to the GUI mode. You will not be able to perform operations that require the reboot of the system, such as restore a system volume or clone a system disk. These operations only can be done through the GUI.

Scripting is intended only for backup.

1.1. Working in the command-line mode

An administrator might need a console interface in some situations. Acronis Backup & Recovery 10 supports this mode with trueimagecmd.exe utility. The file is located in the folder where Acronis Backup & Recovery 10 has been installed, by default it is C:\Program Files\Acronis\BackupAndRecovery.

This utility is also available when operating under the PE-based bootable media.

1.1.1. Supported commands

trueimagecmd has the following format:

```
trueimagecmd /command /option1 /option2…
```

Commands may be accompanied with options. Some options are common for most trueimagecmd commands, while others are specific for individual commands. Below is a list of supported commands and compatible options.

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Command	Common Options	Specific Options
create Creates an image of specified disks and partitions	/filename:[file name] /password:[password] /asz:[number of archive] /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password] /incremental /differential /compression:[0…9] /split:[size in MB] /oss_numbers /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/harddisk:[disk number] /partition:[partition number] /file_partition:[partition letter] /raw /progress:[on|off] /exclude_names:[names] /exclude_masks:[masks] /exclude_system /exclude_hidden /before:[pre-data capture command] /after:[post-data capture command] /use_vss
filebackup Backs up specified files and folders	/filename:[file name] /password:[password] /asz:[number of archive] /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password] /incremental /differential /compression:[0…9] /split:[size in MB] /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/include:[names] /exclude_names:[names] /exclude_masks:[masks] /exclude_system /exclude_hidden /before:[pre-data capture command] /after:[post-data capture command] /use_vss
deploy Restores disks and partitions, except for the MBR, from an image	/filename:[file name] /password:[password] /asz:[number of archive] /index:N /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password] /oss_numbers /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/file_partition:[partition letter] /harddisk:[disk number] /partition:[partition number] /target_harddisk:[disk number] /target_partition:[partition number] /start:[start sector] /size:[partition size in sectors] /fat16_32 /type:[active|primary|logical] /preserve_mbr **When using the Acronis Universal Restore option:** /ur_path:[path] /ur_username:[user] /ur_password:[pwd] /ur_driver:[inf-filename]

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deploy_mbr Restores the MBR from a disk or partition image	/filename:[file name] /password:[password] /asz:[number of archive] /index:N /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password] /oss_numbers /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/harddisk:[disk number] /target_harddisk:[disk number]
filerestore Restores files and folders from a file archive	/filename:[file name] /password:[password] /asz:[number of archive] /index:N /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password] /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/target_folder:[target folder] /overwrite:[older|never|always] /restore_security:[on|off] /original_date:[on|off]
verify Verifies the archive data integrity	/filename:[file name] /password:[password] /asz:[number of archive] /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password] /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	
pit_info Displays the numbered list of backups, contained in the specified archive	/filename:[file name] /password:[password] /asz:[number of archive] /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password]	
consolidate Creates a consistent copy of the archive which will contain only the specified backups	/filename:[file name] /password:[password] /ftp_user:[username] /ftp_password:[password] /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/target_filename:[file name] /include_pits:[pits numbers] /net_src_user:[username] /net_src_password:[password] /net_user:[username] /net_password:[password]

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convert Converts an image to virtual disk format for using with a virtual machine	/filename:[file name] /password:[password] /asz:[number of archive] /index:N /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password] /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/target_filename:[file name] /harddisk:[disk number] /vm_type:[vmware|esx|microsoft|parallels] /ur /ur_path:[path]
list Lists available drives and partitions. When used with the **filename** option, it lists the image contents	/password:[password] /index:N /asz:[number of archive] /net_user:[username] /net_password:[password] /ftp_user:[username] /ftp_password:[password]	/filename:[file name]
explore Connects an image as a virtual drive	/filename:[file name]* /password:[password] /asz:[number of archive] /index:N /net_user:[username] /net_password:[password] /log:[file name] /log_net_user:[remote user] /log_net_password:[password] *for a split image, the name of the last created file	/partition:[partition number] /letter:X
unplug Disconnects the image connected as a virtual drive		/letter:X /letter:all
asz_create Creates the Acronis Secure Zone on the selected drive	/password:[password] /oss_numbers /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/harddisk:X /partition:[partition number] /size:[ASZ size in sectors|unallocated] /asz_activate
asz_activate Activates the Acronis Startup Recovery Manager	/password:[password]	
asz_content Displays the Acronis Secure Zone size, free space and contents	/password:[password]	

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asz_files Displays the Acronis Secure Zone size, free space and contents using the generated file names	/password:[password]	
asz_delete_files Deletes the most recent backup in the archive located in the Acronis Secure Zone	/filename:[file name] /password:[password] /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	
asz_delete Deletes the Acronis Secure Zone	/password:[password] /oss_numbers /reboot /log:[file name] /log_net_user:[remote user] /log_net_password:[password]	/partition:[partition number]
clone Clones a hard disk	/reboot	/harddisk:[disk number] /target_harddisk:[disk number]
help Shows usage		
ls_check Checks if there are licenses for the local machine on the license server		

1.1.2. Common options

1.1.2.1. Access to archives

filename:[file name]

a) Backup file name, if the archive location is other than ASZ.

b) Archive name, when restoring or deleting files from ASZ. Can be obtained with **asz_files**.

password:[password]

a) Password for the archive (if required), if the archive location is other than ASZ.

b) Password for the ASZ (if required), if archive location is ASZ.

asz:[number of archive]

Addresses to the ASZ and selects the archive (a full backup with or without increments).

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To get the archive number, use **asz_content.**

index:N

N = Number of the backup in an archive:

- 1 = basic full backup
- 2 = 1st increment… and so on
- 0 (default) = latest increment

Selects a backup in a sequence of incremental backups inside the archive.

To get a backup index from the ASZ, use **asz_content**.

net_user:[username]

Specify a user name for network drive access.

net_password:[password]

Specify a password for network drive access.

ftp_user:[username]

Specify a user name for access to an FTP server.

ftp_password:[password]

Specify a password for access to an FTP server.

1.1.2.2. Backup options

incremental

Set the backup type to incremental.

If not specified or there is no basic full backup, a full backup will be created.

differential

Set the backup type to differential.

If not specified or there is no basic full backup, a full backup will be created.

compression:[0...9]

Specify the data compression level.

It ranges from 0 to 9 and is set to 3 by default.

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split:[size in MB]

Split the backup into parts of the specified size, if the archive location is other than ASZ.

1.1.2.3. General options

oss_numbers

Declares that numbers of partitions in the **/partition** option are adjusted for the MBR partition table rather than just as ascending numbers. This means that primary partitions have numbers 1-1, 1-2, 1-3, 1-4; logical partitions numbers start with 1-5. For example, if the disk has one primary and two logical partitions, their numbers can appear as follows:

```
/partition:1-1,1-2,1-3
```

or

```
/oss_numbers /partition:1-1,1-5,1-6
```

reboot

Reboot the server after the operation is completed.

log:[file name]

Create a log file of the current operation with the specified file name.

log_net_user:[remote user]

If the log file is created on a network share, include the user name for logon to the share.

log_net_password:[password]

If the log file is created on a network share, include the password for logon to the share.

1.1.3. Specific options

1.1.3.1. create

harddisk:[disk number]

Specifies the hard disks to include into the image file. The list of available hard disks is provided by the **/list** command. An image may contain data of more than one hard disk. In that case, separate disk numbers by commas, e.g.:

```
/harddisk:1,3
```

By specifying

```
/harddisk:DYN
```

you will back up all dynamic volumes present in the system.

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partition:[partition number]

Specifies the partitions to include into the image file. The list of available partitions is provided by **/list**. Partition numbers are specified as **<disk number>-<partition number>**, e.g.:

```
/partition:1-1,1-2,3-1
```

Dynamic volumes are specified with the prefix DYN, e.g.:

```
/partition:DYN1,DYN2
```

file_partition:[partition letter]

Specifies the partition where the image file will be stored (by letter or number). This option is used with **filename:[file_name]**. In that case the file name must be specified without a drive letter or root folder. For example:

```
/file_partition:D /filename:”\1.tib”
```

Dynamic volumes are specified with the prefix DYN, e.g.:

```
/file_partition:DYN1 /filename:”\1.tib”
```

raw

Use this option to create an image of a disk (partition) with an unrecognized or unsupported file system. This will copy all disk/partition contents sector-by-sector. Without this option only the sectors containing useful system and user data are imaged (for the supported file systems).

progress:[on | off]

Shows/hides the progress information (percent completed). It is shown by default.

exclude_names:[names]

Files and folders to be excluded from the backup (comma separated). For example:

```
/exclude_names:E:\MyProject\111.doc,E:\MyProject\Old
```

exclude_masks:[masks]

Applies masks to select files to be excluded from the backup. Use the common Windows masking rules. For example, to exclude all files with extension **.exe**, add ***.exe**. **My???.exe** will exclude all **.exe** files with names consisting of five symbols and starting with “my”.

exclude_hidden

Excludes all hidden files from the backup.

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before:[pre-data capture command]

Enables to define the command to be automatically executed before data capture at the beginning of the backup procedure. For example:

```
/before:"net stop MSSQLSERVER"
```

after:[post-data capture command]

Enables to define the command to be automatically executed after data capture at the beginning of the backup procedure. For example:

```
/after:"net start MSSQLSERVER"
```

use_vss

Notifies the VSS-aware applications that the backup is about to start. This ensures the consistent state of all data used by the applications, in particular, completion of all database transactions, at the moment of taking the data snapshot. The data consistency, in turn, ensures that the application will be recovered in the correct state and become operational immediately after recovery.

1.1.3.2. filebackup

include:[names]

Files and folders to be included in the backup (comma separated). For example:

```
/include:E:\Workarea\MyProject
```

exclude_names:[names]

Files and folders to be excluded from the backup (comma separated). For example:

```
/exclude_names:E:\MyProject\111.doc,E:\MyProject\Old
```

exclude_masks:[masks]

Applies masks to select files to be excluded from the backup. Use the common Windows masking rules. For example, to exclude all files with extension **.exe**, add ***.exe**. **My???.exe** will exclude all **.exe** files with names consisting of five symbols and starting with “my”.

exclude_system

Excludes all system files from the backup.

exclude_hidden

Excludes all hidden files from the backup.

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before:[pre-data capture command]

Enables to define the command to be automatically executed before data capture at the beginning of the backup procedure. For example:

```
/before:"net stop MSSQLSERVER"
```

after:[post-data capture command]

Enables to define the command to be automatically executed after data capture at the beginning of the backup procedure. For example:

```
/after:"net start MSSQLSERVER"
```

use_vss

Notifies the VSS-aware applications that the backup is about to start. This ensures the consistent state of all data used by the applications, in particular, completion of all database transactions, at the moment of taking the data snapshot. The data consistency, in turn, ensures that the application will be recovered in the correct state and become operational immediately after recovery.

1.1.3.3. deploy

file_partition:[partition letter]

Specifies the partition where the image file will be stored (by letter or number). This option is used with **filename:[file_name]**. In that case the file name must be specified without a drive letter or root folder. For example:

```
/file_partition:D /filename:”\1.tib”
```

Dynamic volumes are specified with the prefix DYN, e.g.:

```
/file_partition:DYN1 /filename:”\1.tib”
```

harddisk:[disk number]

Specifies the basic hard disks to restore.

partition:[partition number]

Specifies the partitions to restore.

Dynamic volumes are specified with the prefix DYN, e.g.:

```
/partition:DYN1
```

target_harddisk:[disk number]

Specifies the hard disk number where the image will be restored.

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By specifying

```
/target_harddisk:DYN
```

you will select unallocated space on all dynamic disks that are present in the system.

target_partition:[partition number]

Specifies the target partition number for restoring a partition over the existing one. If the option is not specified, the program assumes that the target partition number is the same as the partition number specified with the **/partition** option.

Dynamic volumes are specified with the prefix DYN, e.g.:

```
/target_partition:DYN1
```

start:[start sector]

Sets the start sector for restoring a partition to the hard disk unallocated space.

size:[partition size in sectors]

Sets the new partition size (in sectors).

fat16_32

Enables the file system conversion from FAT16 to FAT32 if the partition size after recovery is likely to exceed 2 GB. Without this option, the recovered partition will inherit the file system from the image.

type:[active | primary | logical]

Sets the restored partition active, primary or logical, if possible (for example, there cannot be more than four primary partitions on the disk). Setting a partition active always sets it primary, while a partition set primary may remain inactive.

If the type is not specified, the program tries to keep the target partition type. If the target partition is active, the restored partition is set active. If the target partition is primary, and there are other primary partitions on the disk, one of them will be set active, while the restored partition becomes primary. If no other primary partitions remain on the disk, the restored partition is set active.

When restoring a partition on unallocated space, the program extracts the partition type from the image. For the primary partition, the type will be set as follows:

- if the target disk is the 1st according to BIOS and it has no other primary partitions, the restored partition will be set active
- if the target disk is the 1st according to BIOS and there are other primary partitions on it, the restored partition will be set logical
- if the target disk is not the 1st, the restored partition will be set logical.

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preserve_mbr

When restoring a partition over an existing one, the target partition is deleted from the disk along with its entry in the target disk MBR. Then, with the **preserve_mbr** option, the restored partition's entry will occupy the upper empty position in the target disk MBR. Thus, the target disk MBR is preserved. If not specified, the restored partition's entry will occupy the same position as in the source disk MBR saved in the image. If the position is not empty, the existing entry will be moved to another position.

Options specific for Universal Restore

The following options are available when using the Universal Restore add-on to Acronis Backup & Recovery 10.

ur_path:[path]

Specifies using Acronis Universal Restore and the path to the drivers storage.

ur_username:[username]

Specifies using Acronis Universal Restore and a user name.

When getting access to a place located on the remote computer, the *username* depends on the service which is used to get access to the remote resource. E.g. if the remote resource is a shared folder located on a workgroup computer, the *username* must contain the remote computer name ("computer_name\user_name"). If the resource is located on an FTP-server the computer name is not required. When the target and local computer are members of different domains, the *username* must contain the name of the domain the target computer is the member of (e.g. "domain_name\user_name").

ur_password:[pwd]

Specifies using Acronis Universal Restore and a password associated with the **ur_username** option value.

ur_driver:[inf-filename]

Specifies using Acronis Universal Restore and the mass-storage driver to be installed.

1.1.3.4. deploy_mbr

harddisk:[disk number]

Specifies the basic hard disk to restore the MBR from.

target_harddisk:[disk number]

Specifies the target hard disk where the MBR will be deployed to.

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1.1.3.5. filerestore

target_folder:[target folder]

Specifies a folder where folders/files will be restored (a target folder). If not specified, the original path is re-created from the archive.

overwrite:[older | never | always]

This option allows you to keep useful data changes made since the backup being restored was done. Choose what to do if the target folder contains a file with the same name as in the archive:

- *older* – this will give priority to the most recent file modification, whether it be in the archive or on the disk.
- *never* – this will give the file on the hard disk unconditional priority over the archived file.
- *always* – this will give the archived file unconditional priority over the file on the hard disk.

If not specified, the files on the disk will always be replaced with the archived files.

restore_security:[on | off]

Specifies whether to restore files' security attributes (default) or whether the files will inherit the security settings of the folder where they will be restored.

original_date:[on | off]

Specifies whether to restore files' original date and time from the archive or whether to assign the current date and time to the restored files. If not specified, the current date is assigned.

1.1.3.6. consolidate

target_filename:[file name]

Specifies the path to and name of the archive copy to be created. If there are two or more backups (pits) in the copy, numbers will be added to their names.

include_pits:[pits numbers]

Specifies the backups (pits) to be included in the archive copy. To get the numbers of pits, use **pit_info**. Separate multiple values with a comma, for example:

```
/include_pits:2,4,5
```

net_src_user:[username]

Specifies the *username* for logon to the network share to access the source archive.

net_src_password:[password]

Specifies the *password* for logon to the network share to access the source archive.

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net_user:[username]

Specifies the *username* for logon to the network share to save the resulting archive.

net_password:[password]

Specifies the *password* for logon to the network share to save the resulting archive.

1.1.3.7. convert

target_filename:[file name]

Specifies the path to and name of the virtual disk file to be created. The file extension corresponds to the type of virtual machine to which the virtual disk will be added:

- VMware virtual machine - **.vmdk**
- MS virtual machine and Citrix XenServer - **.vhd**
- Parallels virtual machine - **.hdd**.

harddisk:[disk number]

Specifies the hard disks to convert by numbers. For each disk, a separate virtual disk will be created.

By specifying

```
/harddisk:DYN
```

you will convert all dynamic volumes that are present in the system.

vm_type:[vmware|esx|Microsoft|parallels]

The type of virtual machine to which the virtual disk will be added.

ur

Use when converting the image of a disk, containing Windows, and the resulting virtual disk is supposed to be bootable. With this key, the program will add drivers, necessary for the virtual machine type selected with the **vm_type** key, to the resulting virtual disk. If the image was taken from a virtual machine of the same type, normally the key is not needed.

Drivers for the virtual machine reside in the storage, defined by the registry key *HKEY_LOCAL_MACHINE\SOFTWARE\Acronis\UniversalRestore\DriversPackPath*. In case the storage has been moved, please change the key or use the command **ur_path:[path]**.

ur_path:[path]

The same as **ur** with custom path to the virtual machine drivers storage.

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1.1.3.8. list

filename:[file_name]

With this option, the image contents are displayed.

When listing image contents, the partition numbers may not coincide with those in the drives/partitions list, if the image does not contain all the disk partitions. For example, if the image contains partitions 2-3 and 2-5, they will be listed as 2-1 and 2-2.

If the **deploy /partition** command cannot find a partition in the image by its physical number, use the **partition:<number in the image> /target_partition:<physical number of the target partition>** keys. For the above example, to restore partition 2-5 to its original place use:

```
/partition:2-2 /target_partition:2-5
```

1.1.3.9. explore

partition:[partition number]

Specifies a list of partitions to be mounted as virtual drives. Without this option, all partitions stored in the image will be mounted.

To obtain the partition number for this option, list the image contents with the **/list/filename** command and use the number from the Idx column.

letter:X

Assigns letters to the mounted drives. This option is used with the **partition** option only.

1.1.3.10. unplug

letter:X

Specifies the virtual drive to be disconnected by letter.

letter:all

Disconnects all virtual drives.

1.1.3.11. asz_create

harddisk:X

Specifies the hard disk number where the Acronis Secure Zone will be created.

partition:[partition number]

Specifies partitions from which free space will be taken for Acronis Secure Zone.

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size:[ASZ size in sectors | unallocated]

Sets the Acronis Secure Zone size (in sectors).

If not specified, the size is set as an average between the maximal (unallocated space plus free space on all partitions selected with the **partition** option) and minimal (about 35MB) values.

Either way, the program will first use the unallocated space. If there is not enough unallocated space, the selected partitions will be decreased. Resizing of locked partitions requires a reboot.

With “unallocated”, the zone will use all unallocated space on the disk. Partitions will be moved, if necessary, but not resized. Moving of locked partitions requires a reboot. The **partition** option is ignored.

asz_activate

Activates the Acronis Startup Recovery Manager. The option will not take effect if the system partition is resized during Acronis Secure Zone creation. In that case, use the separate **asz_activate** command.

1.1.3.12. asz_delete

partition:[partition number]

Specifies partitions to which free space will be added after the Acronis Secure Zone is deleted. If you specify several partitions, the space will be distributed proportionally based on each partition’s size.

1.1.3.13. clone

harddisk:[disk number]

Specifies a source hard disk which will be cloned to the new hard disk.

target_harddisk:[disk number]

Specifies the target hard disk number where the source hard disk will be cloned.

1.1.4. trueimagecmd.exe usage examples

1.1.4.1. Image disks and partitions

- The following command will create an image named 1.tib of partitions 2-1 and 1-3:

  ```
  trueimagecmd /create /filename:"C:\Test\1.tib" /partition:2-1,1-3
  ```

  The image will be saved to the C:\Test\ folder.

- The following command will create an image of partitions 2-1 and 1-3 in the Acronis Secure Zone:

  ```
  trueimagecmd /create /asz /partition:2-1,1-3
  ```

- The following command will create an image named 1.tib of partitions 2-1 and 1-3:

  ```
  trueimagecmd /create /filename:"\Test\1.tib" /partition:2-1,1-3
  ```

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```
/file_partition:3-1
```

The image will be saved in the folder \Test on partition 3-1.

- The following command will append an incremental image to the image named 1.tib of hard disk 2:

```
trueimagecmd /create /filename:"C:\Test\1.tib" /password:qwerty
/harddisk:2 /reboot /raw /incremental /compression:5 /split:640
/progress:off
```

The image will be saved to C:\Test\ folder, protected with password “qwerty”, split into 640-MB parts, and contain all cluster data. Image compression level is 5. The server will be rebooted after the operation is completed.

- The following command will create an image of partition 2-1 named arc.tib in the shared folder \\server1\folder:

```
trueimagecmd /create /partition:2-1 /filename:\\server1\folder\arc.tib
/net_user:user1 /net_password:pw1 /log:\\server2\dir\log1.log
/log_net_user:user2 /log_net_password:pw2
```

The operation log file log1.log will be saved on another share \\server2\dir\. Credentials for both shares are provided.

- The following command will create an image of partition 2-1 in the archive.tib file located on the FTP server:

```
trueimagecmd /create /partition:2-1 /filename:ftp://server/folder/archive.tib
/ftp_user:usr1 /ftp_password:pswd1
```

1.1.4.2. Restore disks and partitions

- The following command will restore partition 2-1 from image 1.tib to the original location:

```
trueimagecmd /deploy /filename:"C:\Test\1.tib" /partition:2-1
```

- The following command will restore hard disk 2 from image 1.tib, protected with password ‘qwerty’, to the original hard disk:

```
trueimagecmd /deploy /filename:"C:\Test\1.tib" /password:qwerty
/harddisk:2
```

- The following command will restore partition 2-1, stored in image 1.tib, to partition 1-1:

```
trueimagecmd /deploy /filename:"C:\Test\1.tib" /partition:2-1
/target_partition:1-1
```

- The following command will restore partition 2-1, stored in image 1.tib, to hard disk 3:

```
trueimagecmd /deploy /filename:"C:\Test\1.tib" /partition:2-1
/target_harddisk:3 /start:63 /size:64000 /type:logical
```

A new logical partition will be created on disk 3 starting from sector 63. The partition will occupy about 64000 sectors—the exact size will depend on disk geometry and the type of the file system.

- The following command will restore partition 1-1, stored in image Server30Cdrive.tib, protected with password ‘123qwe’, to partition 2-1. The restored partition will be of the active type:

```
trueimagecmd /deploy /filename:z:\Server30Cdrive.tib /partition:1-1
/target_partition:2-1 /type:active /password:123qwe
```

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- The following command will restore the MBR from the image of hard disk 1 to the same hard disk 1. The image is contained in the 3rd backup created in archive number 2, located in Acronis Secure Zone that is protected with password 'pswd':

```
trueimagecmd /deploy_mbr /harddisk:1 /asz:2 /index:3 /password:pswd
```

- The following command will restore the MBR from the image of hard disk 1 to hard disk 2. The image is contained in the arc.tib file located on the FTP server:

```
trueimagecmd /deploy_mbr /harddisk:1 /target_harddisk:2
/filename:ftp://server/folder/arc.tib /ftp_user:fuser
/ftp_password:fpswd
```

1.1.4.3. Back up files

- The following command will back up files from the MyProject folder residing in D:\Workarea, except for files in the Old subfolder and hidden files, to the Myproject.tib file and save this file in the E:\Backups folder:

```
trueimagecmd /filebackup /filename:E:\Backups\Myproject.tib
/include:D:\Workarea\MyProject /exclude_names: D:\Workarea\MyProject\Old
/exclude_hidden
```

1.1.4.4. Restore files

- The following command will restore all files from E:\Backups\Myproject.tib to the original folder and assign the files the original date and time:

```
trueimagecmd /filerestore /filename:E:\Backups\Myproject.tib
/original_date
```

  Since the /overwrite option is not specified, the latest file modifications will be replaced with the original ones.

1.1.4.5. Consolidate backups

- The following command will display the numbered list of backups, contained in the archive Kons.tib residing on the network share \\smbsrv\Archives\:

```
trueimagecmd /pit_info /filename:\\smbsrv\Archives\Kons.tib
```

```
C:\Program Files\Acronis\TrueImageEnterprise>trueimagecmd /pit_info
/filename:\\srv\elenel\kons.tib
Pit number: 1
   type: image; kind: base; date: 6/27/2009 11:39:10 AM
Pit number: 2
   type: image; kind: incremental; date: 6/27/2009 11:43:13 AM
Pit number: 3
   type: image; kind: incremental; date: 6/27/2009 11:44:04 AM
Pit number: 4
   type: image; kind: incremental; date: 6/27/2009 11:48:22 AM
Pit number: 5
   type: image; kind: incremental; date: 6/27/2009 11:50:32 AM

Operation has succeeded.
```


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- The following command will create on disk D: an archive consisting of three files Kons_new.tib, (pit 2 of the archive \\smbsrv\Archives\Kons.tib, former \\smbsrv\Archives\Kons2.tib) Kons_new2.tib (pit 4, former \\smbsrv\Archives\Kons4.tib) and Kons_new3.tib (pit 5, former \\smbsrv\Archives\Kons5.tib):

```
trueimagecmd /consolidate /filename:\\smbsrv\Archives\Kons.tib
/target_filename:D:\Kons_new.tib /include pits:2,4,5
```

1.1.4.6. Convert an image to virtual disk

- The following command will convert images of disks 1 and 3, contained in the file C:\MyBackup.tib, to the virtual disks C:\MyHDD.vmdk and C:\MyHDD2.vmdk for using with VMware type virtual machines:

```
trueimagecmd /convert /filename:C:\MyBackup.tib
/target_filename:C:\MyHDD.vmdk /vm_type:vmware /harddisk:1,3
```

1.1.4.7. List

- The following command will list available partitions:

```
trueimagecmd /list
```

- The following command will list contents of the latest image located in Acronis Secure Zone:

```
trueimagecmd /list /asz
```

1.1.4.8. Check for assigned licenses

- The following command will check if there are licenses assigned to the local machine on the license server.

```
trueimagecmd /ls_check
```

The result is a list of used licenses for the local machine in the following format:

```
SKU | (trial)/empty | valid/invalid
```

The empty "trial" field means that a standard license is assigned to this machine.

Example:

```
Acronis Backup & Recovery 10 Advanced Server     (trial)      invalid
Acronis Backup & Recovery 10 Advanced Server                  valid
```

1.1.4.9. Acronis Secure Zone: managing backups by archive numbers

- The following command will list the Acronis Secure Zone size, free space and contents:

```
trueimagecmd /asz_content
```

Assume that the contents of Acronis Secure Zone are as follows:

```
C:\Program Files\Acronis\BackupAndRecovery>trueimagecmd /asz_content
ASZ size: 34.439 GB
ASZ free space: 34.409 GB
ARCHIVE number: 1
      index: 1; type: file, base; creation time: 4/2/2009 3:52 PM
ARCHIVE number: 2
```

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```
      index: 1; type: file, base; creation time: 4/2/2009 4:04 PM
      index: 2; type: file, incremental; creation time: 4/4/2009 6:31 PM
      index: 3; type: file, incremental; creation time: 4/4/2009 6:32 PM
```

In our example, the Acronis Secure Zone contains two archives. The older archive #1 consists of one full (base) file-level backup created on **4/2/2009 at 3:52**. The second archive contains a base file-level backup with two increments. You can restore data from any backup as follows:

```
trueimagecmd /filerestore /asz:2 /index:2 /target_folder:e:
```

This will restore files and folders from the backup created on **4/4/2009 at 6:31 PM** with their original paths to the root of partition E.

```
trueimage /list /filename:asz://2 /index:3 /password:aszpw
```

which is equal to:

```
trueimagecmd /list /asz:2 /index:3 /password:aszpw
```

This will list content of the 3rd backup created in archive number 2, located in Acronis Secure Zone that is protected with password 'aszpw'.

1.1.4.10. Acronis Secure Zone: managing backups by file names

- The following command will list the Acronis Secure Zone size, free space and contents using generated filenames:

  ```
  trueimagecmd /asz_files /password:aszpw
  ```

Assume that the contents of Acronis Secure Zone are as follows:

```
C:\Program Files\Acronis\BackupAndRecovery>trueimagecmd /asz_files
/password: aaa
ASZ size: 5.387 GB
ASZ free space: 4.363 GB
FILE name: AAA2.TIB; size: 56414317 byte
      type: image,  base; creation time: 2/16/2009 3:43:34 PM
      type: image,  incremental; creation time: 4/25/2009 11:44:47 AM
FILE name: FAAA.TIB; size: 3125550 byte
      type: file,  base; creation time: 8/22/2009 12:28:40 PM
FILE name: FAAB2.TIB; size: 5147 byte
      type: file,  base; creation time: 8/14/2009 2:17:45 PM
      type: file,  incremental; creation time: 8/15/2009 2:19:43 AM
```

In our example, the Acronis Secure Zone contains three archives.

Archive AAA2 (2 stands for the number of backups in the archive) consists of:

- full (base) image backup created on **2/16/2009 at 3:43**
- incremental backup created on **4/25/2009 at 11:44**.

Archive FAAA (F means that this is a file-level archive) contains one base file-level backup.

Archive FAAB2 (B means that this is the second file-level archive in the zone) consists of:

- full (base) file-level backup created on **8/14/2009 at 2:17**

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- incremental backup created on **8/15/2009 at 2:19**.

```
trueimagecmd /filerestore /filename:asz://FAAA /target_folder:e:

/password:aszpw
```

This will restore files and folders with their original paths from the sole base backup FAAA to the root of partition E.

```
C:\Program Files\Acronis\TrueImageEnterprise>trueimagecmd /filerestore
/filename:asz://FAAA /target_folder:e: /password:aaa
[########################################] 100%

Operation has succeeded.
```

1.1.4.11. Acronis Secure Zone: deleting backups

- The following command will delete the most recent backup in the FAAB archive:

```
trueimagecmd /asz_delete_files /password:aszpw /filename:FAAB.tib
```

Assume, the contents of Acronis Secure Zone are as follows:

```
C:\Program Files\Acronis\BackupAndRecovery>trueimagecmd /asz_files
/password: aaa
ASZ size: 5.387 GB
ASZ free space: 4.363 GB
FILE name: AAA2.TIB; size: 56414317 byte
      type: image,  base; creation time: 2/16/2009 3:43:34 PM
      type: image,  incremental; creation time: 4/25/2009 11:44:47 AM
FILE name: FAAA.TIB; size: 3125550 byte
      type: file,  base; creation time: 8/22/2009 12:28:40 PM
FILE name: FAAB2.TIB; size: 5147 byte
      type: file,  base; creation time: 8/14/2009 2:17:45 PM
      type: file,  incremental; creation time: 8/15/2009 2:19:43 AM
```

The above command will delete the incremental backup created on 8/15/2009 at 2:19.

The next execution of the same command will delete the base FAAB backup. By continuing with the FAAA and AAA names, you can clear the Acronis Secure Zone except for the last remaining base backup that cannot be deleted.

1.1.4.12. Clone

- The following command will clone hard disk 2 to hard disk 3:

```
trueimagecmd /clone /harddisk:2 /target_harddisk:3
```

1.1.4.13. Explore image

- The following command will connect all images, stored in file mybackup.tib on the network drive, as virtual drives:

```
trueimagecmd /explore /filename:\\myserver\backup\mybackup.tib
/net_user:john /net_password:qwerty
```

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1.2. Command-line mode usage under DOS

Acronis Backup & Recovery 10 includes the **trueimagecmddos.exe** utility for use in the MS-DOS-compatible environments. It is located in the folder where Acronis Backup & Recovery 10 has been installed, by default it is C:\Program Files\Acronis\BackupAndRecovery.

1.3. Scripting

Scripting is intended only for backup.

1.3.1. Script execution parameters

Scripts are executed by the **TrueImageTerminal.exe** utility located in the Acronis Backup & Recovery 10 installation folder (i.e. C:\Program Files\Acronis\BackupAndRecovery). This utility is also used to monitor backup progress.

TrueImageTerminal execution parameters:

```
TrueImageTerminal.exe [arguments]
```

Arguments include the following:

/help – outputs help information about TrueImageTerminal.exe parameters.

/progress – outputs the progress of backup operations run either from Acronis Backup & Recovery 10 graphics user interface, or from the script.

/execute: [script file name] – executes a script. If there are several scripts to be executed, they are queued. An example for executing MyBackup.tis script:

```
TrueImageTerminal.exe /execute:C:\MyBackup.tis
```

/nowait – an optional script execution argument. Enables to terminate TrueImageTerminal before backup is finished. Example:

```
TrueImageTerminal /execute:C:\MyBackup.tis /nowait
```

*By pressing **Ctrl+C** you can forcibly turn off backup progress output and switch TrueImageTerminal to a background operation.*

*You can terminate the backup operation executed by TrueImageTerminal by pressing **Ctrl+B**.*

1.3.2. Script structure

Scripts are written in the XML language and you can use the following tags:

- Source (p. 25)
- Target (p. 25)
- Options (p. 25)

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1.3.2.1. Source

Specifies the partitions or disks to be imaged. Letters assigned to partitions must be used without a colon. Disk numbers correspond to their system numbers. To create images of several partitions or disks, use the SOURCE tag for each of them, e.g.:

```
<source letter =”C” />
<source letter =”D” />
<source disk =”1” />
<source disk =”2” />
```

1.3.2.2. Target

Specifies the name and the location of an image file, e.g.:

```
<target file=“E:\Mybackup2.tib” username=”username” password=”password” />
```

username and **password** parameters are optional. They are used to access networked resources.

As a target for the image files you can indicate a CD-R/RW or tape drive.

1.3.2.3. Options

This tag can be used with a number of additional parameters:

Compression

specifies the backup compression level. Can be **None, Low, Normal, High**.

Incremental

specifies whether you need to create an incremental image file. If equal to ”false” (or “0”), a complete image file will be created. If there is already a file with the specified name, it will be replaced without warnings. If equal to “true” (or “1”) and there is already a file with the specified name, an incremental image will be created. Otherwise the program will create a complete image file. The default value for this parameter is “true”.

Description

adds a description to an image file. The comment must be a single string (though its length is not limited.)

Split

splits a large image file into a number of smaller files of the specified size, which can be provided in bytes, kilobytes, megabytes, etc.

Password

adds password protection to an image file.

1.3.3. Script usage examples

The following example illustrates the usage of a script to back up two partitions (logical drives), C and F. **mybackup2.tib** is specified as an incremental image file. High compression level is selected and the

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image will be split into 650-MB parts for recording to CD-R/RW media. Password protection will also be added. The entire script must be located between the **<backup>** and **</backup>** tags.

```
<? xml version="1.0" encoding="utf-8" ?>
<backup>
<source letter ="c" />
<source letter ="f" />
<target file="e:\mybackup2.tib" />
<options compression="high" incremental="true" description="this is my backup"
 split="650 Mb" password="" />
</backup>
```

The script for backing up to tape (tapeN specifies the tape numbers):

```
<? xml version="1.0" encoding="utf-8" ?>
<backup>
<source letter =”c” />
<source letter ="f" />
<target cdrw="\taperecorder\\\.\tape0|||” />
<target cdrw="\taperecorder\\\.\tape1|||” />
<options compression="high" incremental="true"
 description="this is my backup" />
</backup>
```


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